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**FIELD PEA (*Pisum sativum*).**

The field pea was early introduced from Europe, where it has been cultivated from remote times. Its preference for a cool climate limits its cultivation as a summer crop to the northern part of the United States or to high mountain valleys which on account of their elevation possess a cool atmosphere even during the summer months. It can be grown in warm parts of the United States, especially southern California, as a winter legume. Trials made in southern Texas warrant a more extended use of it in this way. This predilection toward a cool climate has confined the field-pea industry on this continent very largely to Canada and given rise to the name "Canada field pea" or "Canadian pea."

The field pea is a close relative of the common garden pea, several varieties being used interchangeably as garden and field crops. The main point of difference in the two classes is the wrinkled character of the garden-pea seed, indicating a higher sugar content than the field pea.

The field pea is so well known that little description is necessary. It is an annual leguminous vining plant, having both dwarf and tall varieties, which range from 18 inches to 10 feet in height. Most of the varieties have white flowers, but there are many having colored (red or pink) flowers.

VARIETIES.

Numerous varieties of the field pea are being grown in the United States and Canada, among which the Golden Vine, Marrowfat, Prussian Blue, Wisconsin Blue, Blackeye Marrowfat, Early Britain, and Canadian Beauty are perhaps the most common, although the Potter, Concordia, Chancellor, Daniel O'Rourke, McKay, and Paragon are grown to a considerable extent. Among the new introductions the Kaiser (S. P. I. No. 17006) seems best as a general-purpose pea, making good yields of both seed and forage over an extended area. In the pea-growing districts of Washington, Oregon, and Idaho the Bangalia (S. P. I. No. 21288), an early variety, and the Amraoti (S. P. I. No. 21709), a medium-early variety, can be recommended on account of their good seed-producing qualities.

*Amraoti*.—A medium-early variety resembling very closely the Golden Vine. It was secured from India and has produced a fair amount of forage and excellent yields of grain in the intermountain sections. On the Plains east of the Rocky Mountains it is of less value than some of the more vigorous local varieties.

*Bangalia*.—An early variety obtained from India, rather dwarf of habit, making a light yield of forage, but producing excellent crops of seed in the intermountain sections where the vine growth is apt to be excessive in late varieties. The seed is small, slightly dented, and dull green in color. This variety has been found inferior on the Plains and should be sown only in the intermountain sections.

*Kaiser*.—A medium-early variety with medium-large, speckled seeds and purple-tinted vines. It was secured from Germany and is a strong-growing pea, erect in habit, and making excellent yields of both forage and seed. This variety is of wide adaptation, doing well in most sections where peas are grown. It is able to withstand more heat than most field peas.

*Golden Vine*.—The Golden Vine, also called the French June, is perhaps the most widely grown variety of field pea in the United States. It is a medium-early pea, having a white bloom and small white seeds, and makes good yields of both forage and seed.

*Marrowfat*.—This name has been loosely applied to a class of large white-seeded varieties rather than to any definite variety. This variety has a white bloom and is medium to late, maturing about a week later than the Golden Vine, and makes large quantities of forage with fair yields of seed.

*Canadian Beauty*.—An early variety of the Marrowfat type, maturing at about the same time as the Golden Vine. It makes a large growth of vine and fair yields of seed.

*Blackeye Marrowfat*.—The seeds of the Blackeye Marrowfat are similar in appearance to the regular Marrowfat except for the black hilum. This variety matures a trifle earlier than the Marrowfat and about five days later than the Golden Vine.

*Prussian Blue*.—One of the "blue"-seeded forms of the field pea. This also has a white bloom and is rather late, maturing about 11 days after the Golden Vine. It makes good yields of both forage and seed.

*Wisconsin Blue*.—A "blue"-seeded form similar to the Prussian Blue, but about four days later in maturing. In yields of forage and seed it is about equal to the Prussian Blue, but has, perhaps, a trifle heavier growth of vine.

*Early Britain*.—The season of maturity of the Early Britain is about the same as that of the Golden Vine. The blooms, however, are colored and the seeds large and of a brown color. This variety, although not so well known as the Golden Vine and the Marrowfat, is valuable from both seed and forage standpoints.

SEED BED AND SEEDING.

The field pea does best on a clay-loam soil, but it is not extremely particular in this regard. An abundance of lime in the soil is advantageous. A fairly small rainfall where the temperature is low is sufficient. Low temperatures are very important for the success of the crop, very few peas being grown in the South for this reason. In the Central and Northern States one should be careful to seed the field peas as early in the spring as possible. In the Southern States they must be sown in the fall, about the time cool weather is at hand, or early enough in the spring to mature before hot weather arrives. The spring seeding is usually made in January or February.

The seed of field peas weighs 60 pounds to the bushel and retails from \$1.50 to \$3.25 per bushel. The rate of seeding should vary with the size of the pea and the amount of moisture available. In humid regions or under irrigation the quantity seeded varies from  $1\frac{1}{2}$  bushels of the small peas, like the Golden Vine, to 3 bushels of the large-seeded sorts, like the Marrowfat.

Field peas can be sown broadcast or drilled. The latter method is preferred on account of the more even germination. When broadcasted by hand they may be plowed under lightly, or, if sown on freshly plowed soil, covered with a disk or drag harrow. They should be covered to a depth of  $1\frac{1}{2}$  to 3 inches, depending on the nature of the soil.

HARVESTING.

Peas are usually harvested with a mower, an attachment being fastened to the cutter bar which raises the tangled vines from the ground. It is generally necessary to have several men follow the mower and roll the pea vines back in the swath so that they will not be trampled the next time the mower passes through. In some sections peas are harvested by pasturing with hogs or sheep after the peas are mature. This is a cheap method of gathering the crop, but, as in all such practices, there is considerable waste. Where this method is used, a rotation which brings a clean cultivated crop, like corn, after the field peas should be followed in order to get rid of the weeds.

H. N. VINALL,  
Assistant Agrostologist.

